SF
WA 2917
3/5/1990

3/5/90 Mtg Chempro Pier 91

EPA : JH, SB, DT

Chempro : D Stefani, S Donohue, Sweet Edwards - Anita Lovely

Port of Seattle :

FOIA EXEMPT

FILE COPY

JH : Disc. implicat^ns of jt + several

JH: ~~$~~ - release of oil (or waste oil)

Go thru Marlys's letter

Marlys :

- Lease expires in ~ 2 yr — not clear that Port will renew
  Chempro wants to upgrade facility — haven't been able to get answer.

Order : JH : add jt + several lang.
Marlys will get back to JH on ↑

→ ? State re Model Toxics

→ Chempro to draft suggested language to modify order, EPA to respond.

USEPA RCRA
3012934

NO DATE 19
WA 2917

Port of Seattle
P.O. BOX 1209
Seattle WA 98111

Pier 91
200 West Garfield
Seattle 98119

Northern waterfront of Elliot Bay. It is located within ~~5~~ one quarter mile of Smith Cove + the Smith Cove Waterway.

Chempro Pier 91 is leased from the Port of Seattle + has a total tank capacity of ~~5~~ 9 mil gal. 6.3 mil gal of tank cap is sub-leased to ~~5~~ 60% Pacific Northern Oil Co (PANOCO) as a marine bunker fuel depot. PANOCO's operations of the sub-leased tankage do not involve either storage or treatment of dangerous waste. The remaining 3.5 mil gal of tank cap is managed by Chempro as an interim status dangerous waste storage + treatment fac.

2.

- facility leased from Port since June 1971 Operated by Port prior to lease
- Port of Seattle Commission was owner/operator of tank system since January 1931.
- 1941 early 1970's — ~~Used by~~ Navy took possession of tank system + all surrounding Port of Seattle property.
- In 1972 Navy declared Terminal 91 property as surplus. Property was re-acquired by the Port of Seattle in 1976.

Since operations began in 1971 the Pier 91 Facility's main activities have been waste oil recovery & wastewater treatment.

Typical waste stream processed include oil + coolant emulsions, industrial wastewater + industrial waste sludges. Reclaimed oil processed by Chempro is sold to PANOCO for use as cutting stock in marine boiler fuel oils

The Chemical Pro Inc lease with the Port of Seattle includes piping between the tank system + berths on Pier 91, and berths used for ship loading/unloading (presently Berths K + L).

Submitted Part A 11/14/80 revised 7/23/82.
2/18/86. 7/21/86

Part A lists 22 waste streams

K054, D002, D00, D001-D0011
K048
K049
K050 51 52
F001 - F003
F030
~~W001~~
~~W002~~

Part A tank cap. 9,036,000.

tank treatment cap. 40,000

The results of this report indicated elevated concentrations of a variety of chlorinated + non chlorinated ~~solvents~~ hydrocarbons and general petroleum derived compounds. Selected results are as follows.

Principle constituents identified in the soil borings include toluene (1,200 mg/Kg), ethylbenzene (2,400 mg/Kg), xylenes (5,600 mg/Kg), methylene chloride (13 mg/Kg), ~~and~~ 1,1,1-Trichloroethane (24 mg/Kg), 2-methylnapthalene (~~12~~ 27 mg/Kg)

Base on the information provided in the above Findings 1,1 Dichloroethane, 1,2 Dichloroethane, benzene, and vinyl chloride, which are hazardous constituents listed in appendix ~~IX~~ of 40 CFR Part 261, have been detected in concentrations above EPA primary drinking water standards (i.e., 7 µg/l, 5 µg/l., 5 µg/l., and 2 µg/l. respectively). In addition toluene, total xylene, acetone, chloroform, and 1,1,1 Trichloroethane are also hazardous constituents listed in appendix IX to 40 CFR. Part 261. These constituents have also been detected in the ground water underlying the facility.

1989

The 3013 investigation indicated that contaminated ground flowing beyond the Chempro facility could conceivably result in potential impacts to both the downgradient + shallow aquifer as a water supply source + to marine biota in Elliott Bay. The 3013 investigation indicated that the shallow water table aquifer is approximately 3-7 feet below land surface and flows in a southerly direction to Elliott bay, which is .5 miles ~~distant~~ in distance from the facility.

Hamil PRC NO DATE '9
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Pier 91 — draft h order went out in 12/89
→ Port of Seattle + Chempro
wanted approval of RFI workplan, Bill said no

§ letter going out

→ send offsite letter

NO DATE
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6. Based on the information provided in the above Finding

which are hazardous constituents listed in Appendix VIII of 40 CFR Part 261, have been detected in concentrations above EPA primary drinking water standards (ie. ).

8. Groundwater is pathway of concern. The soil is relatively permeable (sand + gravel) + water table aquifer is approximately 3-7 feet below land surface. Groundwater receptor Elliott Bay (.5 mi).
Marine life in bay is potentially at risk.

Findings

#5 from 3013. order.

#6. "

#7 "

#8.

~~#9.~~

based on the results of the Phase I hydrogeological investigation

In June 1988 a RRRA 3013. order was issued to the facility. ~~to ascertain the nature + extent of further determine the nature + extent of contamination at the facility. The result of the 3013 hydrogeologic investigation submitted on April 24, 1989.~~ The 3013 investigation included groundwater + soil sampling, chemical analysis, + data evaluation. Sampling sites were selected to determine the nature + extent of soil + groundwater quality both upgradient + downgradient of the Pier 91 facility. The results of this report indicated elevated concentrations of across the facility. The principal contaminants identified on site were

Chenpro Pier 91

Toluene. 14,000 ppb TB-2 -6-10

Ethylbenzene. 970 ppb

Xylenes. 2300

methylene chloride 9200, 13,000 (TB-2-15).

acetone TB-2

napthalene

fluorene

dibenzofuran

TB-4.

toluene 330,000 - 1,200,000

ethylbenzene 490,000 - 2,400,000

Xylenes. 920,000 - 5,600,000

TB-7.

toluene 590,000

Xylenes. 2,800,000

TB-6. chrysene 16,000

phenanthrene 21,000

| | | |
|---|---|---|
| CP-107. | phenanthrene | 6100 |
| | fluorene | 4200. |
| | 2-methylnaphthalene | 12,000 |
| CP-108 | methylene chloride | 1600 |
| CP-109 | fluorene | 1700 |
| | total xylenes. | 4700 - 7400 |
| | 2-methylnaphthalene. | 27,000 |
| CP-110. | methylene chloride | 500 |
| | 2-methylnaphthalene. | 25,000 |
| | phenanthrene. | 12,000 |

metals not extremely high.

For most part contamination decreases with depth exceptions are:

TB-7 — BTEX. PNA's. — below silty sand aquitard

CP-108-A — Chlorinated hydrocarbons, PNA's.

CP-109. — Chlorinated hydrocarbons

water table 3-7 below surface.
soil relatively permeable.

contamination CP-103 A + B. — contamination from MDO yard.

most severely cont. soil samples TB-2, TB-4, + TB-7
free product detected in TB-2.

* additional groundwater wells needed in this area.

* groundwater + soil quality under the tank farm not characterized. (except in area of TB-6 + CP-109.)
Soil + groundwater under the tank farms are in need of further investigation to provide info for site assessment.

groundwater quality in deep aquifer was near or below method detection limits.

* additional investigation required ~~in~~ on west along CP-107, CP-104, + CP-105

* further work needed for source identification + establishment of an adequate groundwater monitoring system.

| | CP-106 | CP-108 | CP-104 | CP-109 | Upgrad. CP-105 | CP-110 | 103 | 107 |
|---|---|---|---|---|---|---|---|---|
| | ug/kg L | | | | | | | |
| 1,1 Dichloroethane | 7.4 | | 46 | 3.3 | | 3.6 | | 3.8 |
| 1,2 " | 6.9 | | 9.9 | 1.2 | | 2.0 | | 3.5 |
| trichloroethane | 3.7 | | 3.6 | | | | | |
| tetrachloroethene | 1.3 | | | | | | | |
| toluene | 1.3 | 8.3 | 20 | | | 2.2 | 5.4 | 1.1 |
| benzene | 1.0 | 34 | 5.9 | 30 | | 16 | 12 | 7.9 |
| ethylbenzene | | 1.3 | 5.5 | | | | | |
| total xylenes | | 5.9 | 24 | 47 | | 1.6 | | 4.9 |
| acetone | | 21 | 200 | 210 | 8.8 | | 41 | 20 |
| chloroethane | | 150 | 24 | | | 73 | 15 | 128 |
| phenol | | | 8 | | 2 | | | |
| methylene chloride | 6.8 | 32 | 6.8 | 40 | 5.6 | 21 | 26 | 5.4 |
| vinyl chloride | 2.9 | | 27 | | | | | 4.3 |
| 1,1,1 Trichloroethane | | | 4.2 | | | | | |

| | | |
|---|---|---|
| 4-methylphenol | 36 | 380 |
| naphthalene | 22 | |
| chloroform | | 85 |

| | | ppm |
|---|---|---|
| 1,2 | Dichloroethane | .005 |
| 1,1 | Dich | .007 |
| 1,1,1 | Trichlor. | .2 |
| | Vinyl chloride | .002 |
| | benzene | .005 |

Action levels

acetone 3.5 ppm.

methylen chloride .0047 *

Selected results are as follows:

| Constituents | Concentration in ground water wells. µg/L | | | | | | |
|---|---|---|---|---|---|---|---|
| | 103 | 104 | ~~105~~ 106 | 107 | 108 | 109 | 110 |
| methylene chloride | 26 | 6.8 | 6.8 | 5.4 | 32 | — | 21 |
| 1,1 Dichloroethane | — | 46 | 7.4 | 3.8 | — | 3.3 | 3.6 |
| 1,2 - Dichloroethane | — | 9.9 | 6.9 | 3.5 | — | 1.2 | 2.0 |
| toluene | 5.4 | 20 | 1.3 | 1.1 | 8.3 | — | 2.2 |
| benzene | 12 | 5.9 | 1.0 | 7.9 | 34 | 30 | 16 |
| total xylenes | — | 24 | — | 4.9 | 5.9 | 47 | 1.6 |
| acetone | 41 | 200 | — | 20 | 21 | 210 | — |
| chloroethane | 15 | 24 | — | 128 | 150 | — | 73 |
| vinyl chloride | — | 27 | 2.9 | 4.7 | — | — | — |
| 1,1,1 Trichloroethane | — | 4.2 | — | — | — | — | — |

| Constituents | Concentration in soil. mg/Kg. | | | | |
|---|---|---|---|---|---|
| | TB-4 | TB-7 | TB-6 | TB-2 | TB-1 |
| toluene ~~mg/L~~ ~~µg/Kg~~ | 1,200 | 590 | | 29 | |
| ethylbenzene ~~mg/L~~ | 2,400 | | | | |
| xylenes ~~mg/L~~ | 5,600 | 2,800 | | 60 | |
| methylen chloride | | | | 13 | 8.3 |
| naphthalene | | | | ~~700~~ | |
| 1,1,1 - Trichloroethane | | 24 | | | |